

## DNA REPORT WRITING-Y-STRs

### A. SCOPE

The laboratory report must communicate both the analytical results and the conclusions of the examiner, conveying the essence of the expert testimony in court. The notes and other documentation must support the conclusions of the examiner. Decisions may be made by police officers, attorneys and the courts based on the report alone without examiner clarification, so the report should be able to stand alone. The report must contain the information required in the Division Quality Assurance Manual and the FBI DNA Quality Assurance Audit Document.

Typical casework reporting should follow the recommended reporting statements, as appropriate. It is recognized that not every situation can be represented by these statements and that it may be necessary to modify the statements to accurately reflect the results.

### B. REPORTING STATEMENTS

#### B.1 Y-STR

##### B.1.1 Scenario Example: Evidence matches a reference sample.

**Reporting Statement:** Comparison of Y chromosomal DNA profiles showed the DNA profile from the **NAME** reference sample to be the same as the DNA profile from the **EVIDENCE**. Based upon these results, NAME and any of his male paternal biological relatives cannot be excluded as the source of the (male) DNA from the EVIDENCE. Based upon the US Y-STR Database, the estimated frequency of this matching DNA pattern is approximately 1 in **THE TOTAL NUMBER** males.

**Scenario Example:** The question is whether two males are related. The same Y- STR profiles obtained for both.

**Reporting Statement:** Comparison of Y chromosomal DNA profiles showed the DNA profile obtained from the (Father) reference sample to be the same as the DNA profile obtained from (Child). Based upon these results, FATHER and SON are consistent with being paternal biological relatives. Based upon the US Y-STR Database, the estimated frequency of this matching DNA pattern is approximately 1 in **THE TOTAL NUMBER** males.

##### B.1.2 Scenario Example: Exclusion

Document ID	Revision	Approval	Date Published
1791	10	Supervising Criminalist - Biology	12/20/2018 9:38:49 AM

**Reporting Statement:** NAME and any of his male paternal biological relatives are EXCLUDED as a source of the DNA profiles obtained from the EVIDENCE.

**B.1.3 Scenario Example:** No inclusions with Y-STR analysis; exclusions only

**Reporting Statement:** Comparison of Y chromosomal DNA profiles showed that NAME and any of his male paternal biological relatives are EXCLUDED as a source of the DNA profile obtained from the EVIDENCE.

**B.1.4 Scenario Example:** Mixed Y-STR profile obtained. A dominant and minor cannot be discerned; statistical calculation for mixed Y-STR results has not been validated.

**Reporting Statement:** The Y chromosomal DNA results obtained from the EVIDENCE indicate at least (#) sources/males. Due to the nature of this mixture, no additional conclusions can be offered at this time.

**B.1.5 Scenario Example:** If you have extract left and after doing STRs you believe that there is potential to obtain valuable Y STR data should a reference sample be submitted.

**Reporting Statement:** If Y-chromosomal DNA testing should become necessary, submit suspect reference samples for comparison. The remaining extracted material from the EVIDENCE will be placed in the Washoe County Sheriff's Office Evidence Section under PXXX.

**B.1.6 Scenario Example:** An unknown male Y profile obtained in an item of evidence cannot be excluded as being part of a mixed DNA profile obtained in a different item of evidence.

**Reporting Statement:** The results from the EVIDENCE #2 indicate at least (#) sources of Y chromosomal DNA. An unknown DNA profile was obtained from the EVIDENCE#1. The source of this unknown DNA profile cannot be EXCLUDED as a source of the mixed DNA profile obtained from the EVIDENCE#2. NAME and any of his male paternal biological relatives are EXCLUDED as a source of the DNA profiles obtained from the EVIDENCE.

**B.1.7 Scenario Example:** Autosomal DNA results have been reported for a sample and Y-STR analysis provides additional information for this same sample (such as the number of male contributors).

**Reporting Statement:** In addition, the Y chromosomal DNA results obtained from the EVIDENCE indicate at least (#) sources of male DNA.

Document ID	Revision	Approval	Date Published
1791	10	Supervising Criminalist - Biology	12/20/2018 9:38:49 AM

OR

Additionally, the Y chromosomal DNA results obtained from the EVIDENCE indicate at least (#) sources of male DNA.

Document ID	Revision	Approval	Date Published
1791	10	Supervising Criminalist - Biology	12/20/2018 9:38:49 AM